

Message

From: Kay, Robert [rtkay@usgs.gov]
Sent: 12/19/2018 5:37:15 PM
To: Nordine, John [nordine.john@epa.gov]
Subject: Techalloy Nov. 2018 Monthly Progress Report

John--Here is my review of the November 2018 Monthly Progress Report for the Techalloy Facility in Union, Illinois.

Groundwater Pump and Treat System: Techalloy appears to be citing a number of pumping rates. Is EW-1 pumping at 425 gpm, or 296? or 400? Is EW-2 pumping at 185 or 250 GPM? If table 1 notes total pumping is 687,000 gpd, and EW-1 is pumping at 612,000 gpd on average, then EW-2 must be pumping at 75,000 gpd, which is 52 gallons per minute. Techalloy needs to figure out, and report, how much each of these wells is actually pumping per day, and per minute. It appears they have been reporting optimal pumping rates rather than actual pumping rates in the text and in table 1. Techalloy needs to provide the true rate of pumping given the actual pumping regimen--presumably both wells are pumping most/all the time rather than just one.

Techalloy needs to specify how much time during a given month EW-1 and EW-2 are pumping, and if they pump separately or together.

They also need to identify how they determine the pumping rate. Do they have a flowmeter?

Because the rate and volume of pumping affect the size of the capture zone, an accurate understanding of the actual pumping rate from EW-1 and EW-2 is an essential component to assessing the effectiveness of the extraction system.

Ex. 6 Personal Privacy (PP) Samples and Well Usage: It's my understanding based on the previous submissions that the flowmeter on the **Ex. 6 Personal Privacy (PP)** well reads total flow. If so, the value on the flowmeter when the well was shut down for the season is available and should be provided.

Ex. 6 Personal Privacy (PP) and CWI Pump & Discharge Wells at **Ex. 6 Personal Privacy (PP)** It's acceptable to use preliminary calculations to assess the pumping rate for the new pump and treat well, but a multiple well, constant discharge aquifer test will need to be done using the new well to determine the actual pumping rates required.

Test America Analytical Report: I don't see the "Client Sample Results" page detailing the results of full-scan VOC analysis of the P&T sample. If it is missing it needs to be provided, and an explanation for its omission from this submittal also should be provided.

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